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ABSTRACT

Programs designed tc improve the teaching skills of graduate students may serve two purposes: (1) tc improve the quality of teaching received by undergraduates enrolled in courses taught by graduate student teaching assistants, and (2) tc help prepare the graduate student for future professional teaching responsibilities. Several academic units at the University of Minnesota conduct programs intended to help meet these goals: the College of Agriculture has a regularly scheduled course on effective teaching in a college of agriculture; the College of Biological Sciences provides supervised training for teaching assistants in the laboratory; the College of Education's Center for Economic Education holds seminars and provides systematic feedback to graduate assistants, and the Institute of Child Development has teaching seminars and teaching apprenticeships; the General College has both teaching apprenticeships and an independent teaching experiment; in the College of Letters and Science in Duluth, the Chemistry Department holds a prefall quarter workshop for TA's, and the English Department trains teachers for introductory composition and has a workshop and seminars for instructors of a second-quarter writing course; in the College of Liberal Arts, the Economics, English, History, German, Psychology, and Spanish and Portugese Departments offer training with a variety of approaches; the School of Mathematics at the Institute of Technology has a prefall workshop for new TA's; and the university at Duluth has a half-day workshop fcr assistants from all departments. (MSE)

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comment

CENTER FOR EDUCATIONAL DEVELOPMENT • UNIVERSITY OF MINNESOTA

Number 27 October, 1976

Teacher training takes many forms for graduate student TA's at 'U'

Programs designed to improve the teaching skills of graduate students may serve two purposes:

- *to improve the quality of teaching received by undergraduates enrolled in courses taught by graduate student teaching assistants, and*
- *to help prepare the graduate student for future professional teaching responsibilities.*

Several academic units at the University of Minnesota conduct programs intended to help meet these goals. This issue of Comment *looks briefly at each.*

"Comment"

Jacques Barzun has observed that college and university teaching is "the only profession (except the proverbially oldest in the world) for which no training is given or required."

By the nature of our profession there will always be some truth to that quip. But the profession is changing. Increasingly, solid examples of programs to improve the teaching competence of teaching assistants and associates can be observed across the University.

In part this is due to basic and long-term growth in what is known about learning and teaching as both art and science. In part it is a result of latter-day pressures for more responsible attention to the undergraduate program and to the professional development of those of our graduate students who look to careers in the academy.

A straightforward training program to enhance the effectiveness of undergraduate teaching – with appropriate evaluation of the success of its trainees – surely should be among the routine activities of any department that uses teaching assistants in its instructional program. Especially interesting to me are the efforts of those units which go beyond this minimum to examine in detail and with carefully thought out activities such concerns as these: the principal educational issues and significant instructional methodologies of the discipline involved, the strategies for development of instructional programs in the discipline, the contribution of the discipline to the liberal education of the general student as well as the specialist, and the applications of the growing knowledge of human intellectual development and learning to the discipline.

This compendium provides a wide range of ideas and experience upon which teaching departments may draw in developing or improving programs designed to extend the teaching knowledge and skills of graduate student teaching assistants. In so doing, they will be contributing to the improvement of both the graduate and undergraduate experience at the University.

Henry Koffler
Vice President for Academic Affairs

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

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College of Agriculture

Regularly Scheduled Course: 'Effective Teaching in a College of Agriculture'

This course, designed for the graduate student who intends to teach in a college of agriculture, was introduced in fall, 1974. It aims to help the student develop a personalized philosophy of teaching and to understand and be able to use various methods for improving instruction.

Two basic teaching texts are used, supplemented by units in setting course objectives, writing examinations, and identifying sources. Each student makes a presentation about a particular teaching technique; presentations are videotaped and reviewed with the student by a member of the faculty of the Department of Rhetoric, who suggests ways to improve the student's individual style.

The course drew few students when first offered. Last year, following a special effort to publicize it within the college, enrollment grew from three students to six, and four interested faculty members also attended class sessions.

For information: Keith Wharton, 373-0921.

College of Biological Sciences

General Biology Program

Training for Laboratory Assistants

Fifty-two laboratory sections of the introductory General Biology course, Biology 1-011, are supervised by teaching assistants drawn from three departments of the College of Biological Sciences (Botany, Ecology and Behavioral Biology, and Genetics and Cell Biology).

To prepare for their duties each week, TA's attend all Biology 1-011 lectures and take part in training sessions each Monday. At these sessions, the two faculty members coordinating the training program discuss and sometimes demonstrate the coming week's laboratory work. The faculty members also review lab quizzes designed and administered by TA's four times each quarter.

TA performance is evaluated quarterly, primarily on the basis of student evaluation. The supervising faculty members provide TA's a written assessment of their performance, and meet individually with TA's to suggest methods of improvement when necessary.

For information: Martin Blumenfeld, 376-5276, or Warren Rottmann, 373-3646.

College of Education

Center for Economic Education

Seminars, Systematic Feedback for Graduate Student Instructors

Beginning graduate student instructors in the Economics Department of the College of Liberal Arts are required to participate in a teacher training program initiated in 1970 by the Center for Economic Education.

The program combines weekly teacher training seminars with a variety of systematic feedback procedures making use of videotape, test analysis, and student evaluations.

The seminars, led by a senior faculty member and an experienced senior graduate student, are designed to acquaint participants with teaching methods and skills including these: setting objectives; planning curriculum; designing tests; grading; and developing lecture, discussion, and interaction skills.

Feedback is designed to reinforce the teaching abilities and skills presented in the seminars. Three feedback sources are used: 1) an observation system involving three classroom videotapings with review and criticism of each by a specially trained peer; 2) student evaluation using the Purdue Rating Scale for College Instructors; and 3) test analysis aimed at evaluating one's teaching effectiveness in particular content areas.

Graduate students may receive course credit for participation in the program. Six to fifteen new graduate students take part each year.

A monograph describing this program, *A Training System for Graduate Student Instructors of Economics*, is available from the Center for Educational Development, 373-4537, or the Center for Economic Education, 373-4469.

For information: William Becker, 373-4469.

Institute of Child Development

Teaching Seminar for All Graduate Students

One of two programs designed to help prepare graduate students for the teaching aspects of their careers is a one-quarter seminar required of all graduate students in the spring of their second year. The seminar meets for two hours each week and is offered for one credit. Each student makes a presentation on a topic of interest within the field, often from a recent journal article; presentations are videotaped and reviewed for their effectiveness in communicating the ideas to the group. The seminar was first offered in 1974-75.

For information: John Masters, 373-9862.

Supervised Teaching Apprenticeship

The second program is the teaching apprenticeship required of students who have completed their preliminary Ph.D. examinations and participated in the teaching seminar. Apprentices teach one section of the Institute's introductory child psychology course; the section is made up of twenty to thirty volunteers from the course. A faculty member supervises each apprentice, giving advice and guidance on such matters as selecting a text, designing a syllabus, writing tests, and grading. The faculty supervisor also visits the classroom and gives feedback on presentation skills. A written evaluation by the supervisor is provided to the apprentice and made part of his or her permanent file. No credit is given.

Apprentices and supervisors meet in informal seminars during the quarter to discuss teaching experiences.

Following the apprenticeship, graduate students are permitted to instruct in the Extension Division or during summer sessions.

Three to five graduate students participate in the program each quarter. Faculty members supervise just one apprentice at a time and participation in the program rotates quarterly. The program has been in existence five years.

For information: Helen Dickison, 373-9851, or John Masters, 373-9862.

Resource guide available

A faculty guide to instructional services and facilities on the Twin Cities Campus, published in 1975 by the Center for Educational Development, is still available in limited quantities from the Center (373-4537).

The 48-page handbook, *Instructional Resources*, briefly describes available resources and tells whom to contact for more complete information.

General College

Supervised Teaching Apprenticeship

This program is intended primarily for graduate students who are junior faculty members in General College. Supervised training and on-the-job experiences are provided in teaching and counseling.

Working individually with a General College senior faculty member, a teaching intern takes part in activities which include the following minimum requirements: participating in occasional intern seminars (nine are scheduled for 1976-77); organizing and leading six small-group or classroom discussions; organizing and presenting six classroom lectures; using audiovisual materials twice; developing, evaluating, and grading one classroom assignment and one exam; and tutoring individuals or groups on a regular basis.

Optional activities include: advising and registering students for one quarter; exploring and evaluating new materials for a General College course; attending divisional meetings and meetings of a General College committee for one quarter; and videotaping and evaluating two classroom presentations.

The supervising faculty member coordinates the intern's activities, observes the intern's teaching, confers with the intern, and provides written evaluations and a letter of recommendation for the intern's permanent file.

Interns may register for up to five credits per year through the program; S/N grading is required. The program is administered by the college's Teaching Internship Committee.

For information: Charles Sigmund, 373-3706.

Independent Teaching Experiment

Graduate students who have completed the first year internship program, or who are judged by the

college's Teaching Internship Committee to have sufficient relevant experience, may design and carry out a teaching experiment. The graduate student must have a teaching appointment within the college which offers enough responsibility that the intern may conduct a significant experiment.

The experiment is to focus on improving some aspect of teaching, such as a teaching technique or classroom procedure, text materials, or an approach to the topic. It must be an activity new to the intern and related to the intern's teaching duties.

The intern generally spends fall quarter preparing and applying for approval by the internship committee, winter quarter conducting the experiment and gathering information to use in evaluating it, and spring quarter preparing an evaluation and reporting to the committee and other interns through a presentation in a seminar. Approval of the final report by the internship committee indicates successful completion of the project, and a notation to that effect is entered in the intern's file along with a letter of reference from the committee chair.

The intern may receive up to four credits, to be graded on the S/N system. The intern does not work through a faculty supervisor but reports directly to the internship committee.

For information: Charles Sigmund, 373-3706.

College of Letters and Science (Duluth)

Chemistry Department

Pre-Fall Quarter Workshop

TA's in this department are responsible for laboratory and recitation sections of introductory courses. A five-day workshop, held before the opening of fall quarter classes, introduces TA's to their new role as teacher, and covers both demonstration and questioning techniques. Each TA is videotaped conducting a practice recitation session.

Seven new TA's take part in the workshop each year; returning TA's also may participate.

During the year, the director of the program visits both lab and recitation sections and confers with TA's on ways to improve their teaching techniques.

For information: Vincent Magnuson, 726-7591.

English Department

Training for Teaching Introductory Composition

New TA's handling the introductory composition course must take a four-credit course which begins with a twenty-hour workshop before fall quarter and continues with twice-weekly seminars during the quarter. The current TA training program was introduced, with financial assistance from the Small Grants Program of the Council on Liberal Education, when new course objectives made it necessary to use specially trained instructors.

The emphasis of the workshop is on introduction of the objectives, materials, and teaching methods specific to the composition course, a course developed by department members over the last seven years. Its laboratory format emphasizes the role of the instructor as a resource person rather than an authority figure, active learning through class exercises rather than lectures, clear definition of criteria for passing and failing, unified application of criteria among sections of the course, and several other specific objectives.

Seminars during the quarter include discussion of journal articles and textbook material on such topics as evaluating themes, motivating students, leading discussions, and setting objectives for composition courses. Graduate students also write themes similar to those assigned to their students and discuss their writing and that of their students. They are tested on the text material and receive a grade for their work in the training program. This grade is not affected by their teaching performance.

A faculty member confers with each TA twice during the quarter about the TA's approach to theme evaluation. A faculty member also may visit the classroom and subsequently discuss the TA's performance with him or her. Special student evaluations, developed by the composition course coordinator and University Measurement Services Center, cover the course, text materials, and TA performance.

For information: Roger Lips, 726-7580.

Media Production Fund

About $50,000 will be distributed through the current round of the 1976-77 Media Production Fund, for which proposals are due Dec. 6. The program supports production of professional quality media projects for educational use. Information is available at the Center for Educational Development.

'Supervision, varied experience' valued in GC training program

The variety of teaching-related experiences afforded a beginning teaching assistant in the General College, and close supervision by a senior faculty member, were aspects of the GC teacher training program especially valued by Dan Detzner as a first-year TA.

Detzner has been involved with the training program from two perspectives: first as a student, later as coordinator of the internship program that makes up the first year of training (see description on page 3).

Detzner's first assignment as a TA was to help teach two social sciences courses of William Hathaway, who also acted as his internship supervisor. Detzner recalls that Hathaway "gave me as many opportunities as I wanted" to try various teaching approaches, and offered a good deal of advice on ways to improve. Detzner had an advantage over many of his peers in that he had taught several years at the high school level. This gave him confidence many new teaching assistants lack. Nevertheless, he felt he had a lot to learn about teaching at the college level.

In his second year as a TA, Detzner undertook an independent experiment (see page 3) on a method of self-evaluation for teachers. Working with an assessment model developed by a former College of Education faculty member, Detzner taped and analyzed his own class presentations six times. By comparing what had actually happened in the classroom against the teaching style he hoped to develop, he identified areas in which he wanted to improve by the time of the next taping. For example, he found at first that he was lecturing far more than he wanted to, and practiced ways to increase student participation.

An article on the project was published first by the college and then in the *Journal of Education*. This brought him to the attention of other GC faculty members and resulted in several additional teaching opportunities.

Detzner coordinated the first-year teacher training program for two years until this fall when he was hired by GC for a tenure-track position in the Social and Behavioral Science Division. As coordinator, he was able to assess the attitude of participating students.

Nearly all are pleased with the program, he said. "First, it gives them a variety of teaching experiences that the vast majority of TA's in other units don't get. Second, working with a supervisor helps prepare them for those experiences. They know that in some units, TA's are given a lot of responsibilities but no preparation."

Detzner credits the program with helping him accumulate enough actual teaching experience to compete successfully for his new GC position against more than a hundred other applicants. He said the same has been true for others who have received appointments at GC or elsewhere.

"Solid teaching experience is something which distinguishes you from the mass of other applicants. It causes the people doing the hiring to at least look at you, and that's the important thing for a graduate student these days. With so many applicants for every job you have to have something special to get in the door."

Workshop, Seminars for Instructors of Second-Quarter Writing Course

The second course in a two-course composition sequence is taught by experienced TA's and by senior faculty members. A sixteen-hour workshop extended over four days is offered before fall quarter for TA's and for faculty members who have not recently taught the course. Seminars are held weekly during fall quarter and continue as necessary thereafter.

The training focuses on enabling instructors to help students revise their written pieces through questions and indirect suggestions. Role-playing and exercises based on student writing are used extensively in the training.

For information: Eleanor Hoffman, 726-8234.

College of Liberal Arts

Economics Department

(See College of Education – Center for Economic Education)

English Department

Workshop, Seminars in Teaching Composition

A fall workshop and regularly scheduled seminars throughout the year provide training for first-

year teaching assistants in the English Department. Ninety doctoral candidates conduct the department's composition classes; about thirty-five of these are first-year TA's and take part in the training program.

The workshop meets six hours each day for five days during the week before fall quarter classes begin. It provides a theoretical background in some of the basics of linguistics, writing, and rhetoric as well as in many of the skills used in teaching composition, such as lecture and conference techniques, prose analysis, and grading.

During this workshop participants also receive a syllabus and teaching materials from which they may choose in planning and conducting their first few weeks of classes. Additional materials are provided on a week-by-week basis in seminars held each week during fall and winter quarters (composition is offered in a two-course sequence). The materials are furnished in order to help reduce necessary preparation time, although TA's may adapt ideas and develop materials of their own.

During spring quarter, when the graduate assistants no longer are teaching classes, they attend biweekly seminars to discuss successes and failures of the first two quarters, further explore particular classroom techniques, and help individuals improve their weak points (for example, through additional practice in conference techniques or in helping a composition student develop a humorous paper).

About ten senior faculty members and experienced TA's conduct the fall workshop, and more become involved during the year, visiting classrooms and conferring with the TA's on ways to improve their performance.

Most TA's are from the English Department. For the few who come from other departments, an additional three-day writing workshop precedes the regular fall workshop.

For information: Robert Brown, 373-2956.

History Department

Videotaping, Consultation on Classroom Performance

The History Department's program is aimed at helping its forty-five teaching assistants improve their classroom performance by developing their own individual teaching styles.

Each TA is videotaped twice during the year while teaching an actual class. The graduate student consultant reviews the tape privately with the TA, helping the TA become aware of his or her teaching style and suggesting ways to improve it. The focus is on making the most of individual styles, rather than suggesting a single "correct" model. Day-to-day duties are handled by two graduate students, who do both camerawork and consultation.

Participation by TA's is strongly recommended but no longer mandatory. Although many have been uneasy in advance of the taping, reactions to the program have been consistently positive, according to department members.

The program grew out of a videotape demonstration during a seminar on teaching two years ago and was aided in development by the Small Grants Program of the Council on Liberal Education.

For information: George Green, 373-5845.

German Department

Orientation and Training for Teaching Assistants

New teaching assistants in the German Department attend an eight-hour training program during the week before fall quarter. During that time they are acquainted with the department's expectations of them and with the location and use of various teaching resources such as the Learning Resources Center in Walter Library.

Later in the week they break into groups on the basis of what course they will teach; each group discusses the syllabus for its course.

Discussion of teaching methods and skills takes place in weekly meetings throughout the year between the department's twenty teaching assistants and the training program director. Participants share experiences of the past week and plan approaches for the week to come.

The training director makes several unannounced classroom visits each quarter, usually participating in the class in some way, and team teaches with each new TA on several occasions. Classroom performances are videotaped and discussed individually twice each quarter.

New TA's teach beginning courses offered in the standard lecture-and-recitation format. During their second year, all will receive some exposure to the department's computer- and media-aided language program.

For information: Jonathan Conant, 373-2576.

Psychology Department

Weekly Seminars in Teaching Laboratory Psychology

Ten graduate student TA's each quarter are responsible for laboratory sessions of the department's introductory laboratory psychology course, under the supervision of two or three senior faculty members.

Teaching assistants and senior faculty members meet for ninety minutes each week. During that meeting, a plan for a forthcoming lab session is outlined by one or two TA's or by a senior faculty member. The group then reviews relevant points to be made during that session.

This planning is followed by a review and discussion of the teaching activities during the previous week. These discussions of the TA's experiences are intended to aid in the development of their teaching skills.

For information: Paul Fox, 373-4155.

Spanish and Portuguese Department

In-Service Teaching Training for All Graduate Students

All graduate students in this department attend an intensive forty-hour workshop before fall quarter begins. The workshop is planned to constitute the empirical aspect of Ph.D. training in language and

Summary of teacher training programs for TA's

Unit	Program/focus	When offered	Feedback	Students/yr	Credit
Agriculture, College of	One-quarter course on teaching in a college of agriculture	Twice yearly as part of regular curriculum	Videotape/critique of practice presentation	12	3 cr
Biological Sciences, College of	Training in demonstration techniques for new TA's conducting lab sessions	Weekly during course	Written, based mostly on student evaluation	72	
Education, College of					
Economic Education, Cntr. for	Training in teaching skills for new TA's in CLA Economics Department	Weekly during course	VT/critique, student eval., test analysis	6-15	Arr
Child Development, Inst. of	Seminar on teaching, presentation skills for all graduate students	Weekly for one quarter	VT/critique of practice presentation	10	1 cr
	Supervised teaching apprenticeship (follows seminar, Ph.D. prelims)	One quarter	Observation by supervisor, written evaluation	10	
General College	Supervised teaching internship for first-year junior faculty	One academic year (occasional seminars)	Observation by supervisor, written evaluation	10	Up to 5 cr
	Independent teaching experiment for second-year junior faculty	One academic year	Written evaluation	4	Up to 4 cr
Letters and Science, Col. of (Duluth)					
Chemistry Department	Workshop on demonstration and questioning skills for new TA's	Before fall quarter	VT/critique, classroom visits during year	7-10	
English Department	Workshop, seminars for new TA's teaching introductory composition	Before fall quarter and during year	Seminar grade, classroom visits, student evaluation	8	4 cr
	Workshop, seminars for experienced TA's teaching advanced composition	Before fall quarter and during year	Discussion	6-7	
Liberal Arts, College of					
Economics Department	(See College of Education – Center for Economic Education)				
English Department	Workshop, seminars for new TA's teaching introductory composition	Before fall quarter, seminars spring quarter	Classroom visits, conferences with faculty	35	
History Department	Videotaping and critique of new TA's classroom presentations by trained peer	Each TA taped twice during academic year	VT/critique by peer	45	
German Department	Orientation, workshop, seminars on teaching skills for new TA's	Before fall quarter and during year	VT/critique, classroom visits	20	
Psychology Department	Discussions of course plans, teaching skills for TA's in lab course	Weekly during course	Discussion	10	
Spanish and Portuguese Dept.	In-service training in language teaching for all graduate students	Before fall quarter	Classroom visits, student evaluation	30-35	
Institute of Technology					
Mathematics, School of	Workshop, practice in teaching methods for new TA's	Before fall quarter	Group discussion of practice lectures	23	
University of Minnesota, Duluth	Workshop on classroom techniques for new TA's of any department	Before fall quarter	Discussion	45	

literature, and focuses on as many as eighteen specific aspects of language teaching, including audiolingual teaching methods, improvisational exercises to reinforce cultural content of conversation, and remedial language teaching. The workshop was initiated in 1973 with assistance from the Educational Development Program.

New teaching assistants receive a month of classroom training with an experienced TA before teaching a class on their own. TA's are evaluated by students and by the director of the training program, who makes at least one unannounced classroom visit each quarter.

Because the department emphasizes its graduate students' progress toward their degrees, M.A. candidates may teach no longer than two years, Ph.D. candidates, no longer than three years.

For information: Larry Grimes, 373-5789.

Institute of Technology

School of Mathematics

Pre-Fall Workshop for First-Year TA's

First-year teaching assistants in mathematics take part in a training program consisting of five half-day sessions before the opening of fall quarter. The program is staffed by two faculty members and two experienced TA's.

Principal focus of the program is practice teaching in groups. Each new TA presents several fifteen-minute lectures using preassigned text material. Each practice lecture is followed by a ten-minute discussion led by a program staff member.

TA's also hear presentations on such topics as use of computers and audiovisual materials, attend one or two informal luncheons with faculty members, and take a calculus proficiency test.

During the training program, the staff is able to assess teaching abilities, subject matter competency, and, in the case of foreign students, command of English. This information is sometimes used to alter teaching assignments.

For information: Robert Hardt, 376-7041.

University of Minnesota, Duluth

Half-Day Workshop for TA's from all UMD Departments

A half-day workshop open to teaching assistants from all departments at the University of Minnesota, Duluth was introduced this fall by the Group for the Improvement of Instruction, an informal association made up of twelve faculty members from all colleges and schools on the campus. The workshop, held before the opening of classes, was offered twice to accommodate the forty-five TA's who enrolled.

The workshop focused on two topics: building a positive classroom climate, and learning to ask various types of questions to achieve specific objectives. The three faculty members conducting the workshop illustrated some of the techniques and led students in exercises and discussion.

For information: Virginia Katz, 726-7570.

comment

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